

What is claimed is:

1. A method for use in connection with discontinuous signaling by a signal-transmitting entity (12) in communication with a signal-receiving entity (14), the method for use by the signal-transmitting entity (12) in indicating to the signal-receiving entity (14) during a current time interval a state (signaling active state, DTX state) from among a plurality of different possible states (signaling active states, DTX state) in which the signal-transmitting entity (12) occupies in a time interval in which the signal-transmitting entity (12) either signals all or part of a payload message to the signal-receiving entity (14) or exists in discontinuous mode, wherein the payload message is transmitted in a predefined offset of one or more time intervals from the current time interval and the payload message comprises a sequence of payload message symbols selected from a set of possible payload message symbols, the method characterized in that it comprises:

a step (41) in which in order to indicate whether the payload message is being or was transmitted in a predefined positive or negative offset of one or more time intervals from the current time interval, the signal-transmitting entity (12) additionally signals in the current time interval an indication symbol providing preamble or postamble signalling;

and further characterized in that the indication symbol differs from each of the possible payload message symbols, and in that the indication symbol is sent either in advance of or after the payload message.

2. A method as in claim 1, wherein the indication symbol can be one or another symbol selected from a predetermined group of symbols, and the indication symbol sent is selected based on when the time interval in which the payload is sent or was

sent occurs compared to the current time interval.

3. A method as in claim 1, wherein the payload provided by the signal-receiving entity (12) is provided on a feedback channel as feedback to the signal-receiving entity (14) for data transmitted over a data-transmission channel by the signal-receiving entity (14), wherein in response to receiving and successfully decoding a data signal provided by the data-transmitting entity (14), the signal-transmitting entity (12) provides to the signal-receiving entity (14) a corresponding acknowledgement message (ACK/NACK) in one of the sequence of time intervals corresponding to the time of receipt of the data signal in a predetermined way, the method characterized by further comprising:

a step (41) in which the data-receiving entity (12) additionally provides a preamble symbol in the current time interval if an acknowledgement message (ACK/NACK) is to be sent in the next time interval but not in the current time interval.

4. A method as in claim 3, further characterized in that: a signaling cycle related to the previous, current or next time interval in the feedback channel is adapted according to a minimum applicable interval either in the data-transmission channel or in the feedback channel, whichever minimum applicable interval is higher.

5. The method of claim 5, further characterized in that if neither an acknowledgement message nor a preamble symbol is to be sent in the current time interval, and an acknowledgement message was sent in the previous time interval, then a step (42) is performed in which the signal-transmitting entity (12) additionally provides at least one postamble symbol in one or more respective consecutive time intervals prior to the

signal-transmitting entity (12) entering a mode in which it does not transmit on the feedback channel.

5 6. A method as in claim 5, further characterized in that: a signaling cycle related to the previous, current or next time interval in the feedback channel is adapted according to a minimum applicable interval either in the data-transmission channel or in the feedback channel, whichever minimum applicable interval is higher.

10 7. The method of claim 5, further characterized in that in the step (42) in which the signal-transmitting entity (12) additionally provides at least one postamble symbol, the signal-transmitting entity (12) provides two consecutive postamble symbols if neither a preamble symbol nor an acknowledgement message (ACK/NACK) is to be sent in either the
15 current time interval or the next time interval, and acknowledgement messages (ACK/NACK) were sent in the two immediately preceding time intervals.

8. A signal-transmitting entity (12), characterized in that it is operative according to the method of claim 1.

20 9. A signal-transmitting entity (12), characterized in that it is operative according to the method of claim 2.

10. A signal-transmitting entity (12), characterized in that it is operative according to the method of claim 3.

25 11. A signal-transmitting entity (12), characterized in that it is operative according to the method of claim 4.

12. A signal-transmitting entity (12), characterized in that it is operative according to the method of claim 5.

13. A signal-transmitting entity (12), characterized in that it is operative according to the method of claim 6.

14. A signal-transmitting entity (12), characterized in that it is operative according to the method of claim 7.

5 15. A telecommunication system, including a signal-transmitting entity (12) and a signal-receiving entity (14), characterized in that the signal-transmitting entity (12) is operative according to the method of claim 1, and the signal-receiving entity (14) uses the preamble and postamble
10 signalling to determine the current state of the signal-transmitting entity (12) from among the plurality of different possible states (signalling active states, DTX state).

15 16. A telecommunication system, including a signal-transmitting entity (12) and a signal-receiving entity (14), characterized in that the signal-transmitting entity (12) is operative according to the method of claim 2, and the signal-receiving entity (14) uses the preamble and postamble
20 signalling to determine the current state of the signal-transmitting entity (12) from among the plurality of different possible states (signalling active states, DTX state).

25 17. A telecommunication system, including a signal-transmitting entity (12) and a signal-receiving entity (14), characterized in that the signal-transmitting entity (12) is operative according to the method of claim 3, and the signal-receiving entity (14) uses the preamble and postamble
signalling to determine the current state of the signal-transmitting entity (12) from among the plurality of different possible states (signalling active states, DTX state).

30 18. A telecommunication system, including a signal-transmitting entity (12) and a signal-receiving entity (14),

characterized in that the signal-transmitting entity (12) is operative according to the method of claim 5, and the signal-receiving entity (14) uses the preamble and postamble signalling to determine the current state of the signal-transmitting entity (12) from among the plurality of different possible states (signalling active states, DTX state).

19. A telecommunication system, including a signal-transmitting entity (12) and a signal-receiving entity (14), characterized in that the signal-transmitting entity (12) is operative according to the method of claim 6, and the signal-receiving entity (14) uses the preamble and postamble signalling to determine the current state of the signal-transmitting entity (12) from among the plurality of different possible states (signalling active states, DTX state).

20. A telecommunication system, including a signal-transmitting entity (12) and a signal-receiving entity (14), characterized in that the signal-transmitting entity (12) is operative according to the method of claim 7, and the signal-receiving entity (14) uses the preamble and postamble signalling to determine the current state of the signal-transmitting entity (12) from among the plurality of different possible states (signalling active states, DTX state).